Information Science and Technology Institute Seminar

Ike Nassi
(former) Executive Vice President and Chief Scientist, SAP

"Enterprise Supercomputers Will Enable the Business of Tomorrow"

Monday, June 4, 2012
1 - 2 PM
TA-3, Bldg. 1698, A103, MSL Auditorium

Abstract: For the past 25 years, a huge amount of high-quality work has been done in high-performance scientific and technical computing. Enterprise software companies have harvested some of it by utilizing high-performance, moderately or tightly coupled multi-core commodity servers. However, the question arises, can we do better? How much better? What form would that take? What is needed? What are the longer-term implications? Why is it important to business? We believe that in-memory computing—a combination of technologies around multi-core and in-memory databases—is driving a critical inflection point in the IT industry. This talk will focus on a new generation of technologies that we like to call "enterprise supercomputers." We will discuss the potential performance, scalability, and cost benefits of this approach. With such an emphasis on data-driven decision-making in companies, the system performance and ease-of-use characteristics will be critical. We will also describe how this approach, with its simpler system model, could provide an easier programming and system landscape administration model while at the same time minimizing changes to existing applications.

Biography: Formerly, Dr. Ike Nassi was an Executive Vice President and Chief Scientist at SAP, where was responsible for the Technology Infrastructure practice within SAP Research, and the SAP Sponsored Academic Research Program. He was responsible for the creation of SAP's Global Business Incubator. Currently, he is also a Research Affiliate MIT's Computer Science and Artificial Intelligence Laboratory (CSAIL), and a Research Associate at UC Santa Cruz.

Prior to joining SAP, Dr. Nassi has helped start three companies: Encore Computer, InfoGear Technology, and Firetide. Firetide Inc. is a privately held wireless mesh networking company Dr. Nassi co-founded and then served as its Executive Vice President, CTO and Chairman of the Board. He was the CTO and head of product operations at InfoGear prior to its acquisition by Cisco. He also helped start Encore Computer, a pioneer in symmetric multiprocessors, and a forerunner of today's multicore processors.

He helped start the Computer History Museum in Mountain View, California, where he currently serves as an active member of the Board of Trustees, and before that was a member of the Board of Overseers at the Computer Museum in Boston. Until the end of last year, he served as a Trustee of the Anita Borg Institute for Women and Technology. He currently serves on the Advisory Board of Watermark, a non-profit community of executive women.

In addition to his startup experience, Ike has held executive positions at Cisco Systems, and Apple, where he served in several capacities leading to his position as Senior Vice President of Software and Corporate Officer. He worked at Visual Technology, where he was VP Software Engineering, Digital Equipment Corporation, where he worked on the DEC VAX, was a Consulting Engineer, and at SofTech where he developed avionics support software.

He has been a visiting scientist at MIT/CSAIL, a visiting scholar Stanford University and a visiting scholar in Electrical Engineering and Computer Science at the University of California at Berkeley and has also taught graduate courses at Boston University. He is a member of the Advisory Boards of Alan Kay's Viewpoints Research, the Electrical Engineering and Computer Science Department at Northwestern University, the Center of Excellence for Wireless and Information Technology at Stony Brook University, the School of Engineering at Peking University, the Center for Digital Business at the MIT Sloan School, and IEEE Computer Society Industry Advisory Board.

Ike holds several patents, and a Certificate for Distinguished Service from the Department of Defense for his work on the design of the Ada programming language and was a member of the DARPA's Information Systems and Technology group. He testified before Congress on the Emerging Telecommunications Act of 1991.

He holds memberships in the IEEE and ACM, and graduated with a B.S. in Mathematics, and a M.S. and Ph.D. in Computer Science from Stony Brook University.

Los Alamos NATIONAL LABORATORY EST.1943

ISTI INFORMATION SCIENCE & TECHNOLOGY INSTITUTE

ISSDM INSTITUTE FOR SCALABLE SCIENTIFIC DATA MANAGEMENT

UNCLASSIFIED